

SUMMARY FOR FE-11-03
SELECTED AND POSSIBLE CONTRIBUTING FACTORS

SELECTED FACTORS

Railroad: Union Pacific Railroad Company

Location: Pocatello, Idaho

Region: Region 8

Month: April

Date: April 11, 2003

Time: 10:43 p.m., MST

Data for Fatally Injured Employee(s)

Conductor

55 years old

24 years of service

Last rules training: March 19, 2002

Last safety training: Jan. 13, 2003

Last physical: Jan. 18, 2000

Data for All Employees (Craft, Positions, Activity)

Craft: Transportation and Engine

Positions:

Train MGRHK-11

Engineer

Conductor

Yard Master

Crew Van Driver

Utility Clerk

Manager of Yard Operations

Activity: Switching

EVENT

During a switching operation, the car the Conductor was riding derailed and flipped on its side, causing the Conductor to receive a fatal head injury.

SUMMARY FOR FE-11-03 CONTINUED

POSSIBLE CONTRIBUTING FACTORS

PCF No. 1

During a switching move, the Engineer was forced to make an emergency air brake application, which caused the train to uncouple, allowing 71 cars to roll east, and resulted in the derailment of the car the Conductor was riding and next two adjoining cars, during which the Conductor's car flipped over onto its side.

PCF No. 2

The Conductor did not give the Engineer adequate warning to enable him to safely stop the train short of the red flag. (The crew members had been given instructions, via a track bulletin, that a red flag and derail were in place at milepost 214.25, and they were to stay clear of the portion of track between milepost 214.25 and 214.50 where work was being done. In addition, the Yard Master had informed the Conductor via radio about the red flag.)

PCF No. 3

The lighting in the vicinity of the accident site, originally designed to light the depot for passenger train boarding and de-boarding, did not illuminate any of the yard tracks. Following the accident investigation, the railroad planned to install more lighting in the Pocatello Yard.

REPORT: FE-11-03

RAILROAD: Union Pacific Railroad Company (UP)

LOCATION: Pocatello, Idaho

DATE & TIME: April 11, 2003; 10:43 P.M., MST

EVENT¹: During a switching operation, the car the Conductor was riding derailed and flipped on its side, causing the Conductor to receive a fatal head injury.

EMPLOYEE: Craft: Transportation and Engine (T&E)

Activity: Switching

Occupation: Conductor

Age: 55 years

Length of Service: 24 years

Last Rules Training: March 19, 2002

Last Safety Training: Jan. 13, 2003

Last Physical: Jan. 18, 2000

CIRCUMSTANCES PRIOR TO THE ACCIDENT

Following the completion of a statutory, off-duty period, the Conductor went on duty at 12:05 p.m., MST, on April 11, 2003, at UP's Yard Office, in Pocatello, Idaho. He and an Engineer were assigned to operate Train MGRHK-11 from Pixley, Wyoming, 136 miles east of Pocatello, to Pocatello. The train's final destination was Hinkle, Oregon. Prior to beginning his tour of duty, the Conductor was observed by the Engineer to be fit for duty.

The crew was transported by crew van to Pixley's siding, milepost 78.2, on UP's Portland Division, Pocatello Subdivision. The crew members boarded the train and prepared it for departure. After reviewing their train orders and track warrants, they had a job briefing and departed Pixley. The trip from Pixley to Pocatello was uneventful.

¹ "Event" is defined as "occurrence that immediately precedes and directly results in the fatality." Possible contributing factors are identified in the following report and attached summary.

Upon reaching Pocatello Yard, the crew members contacted the Yard Master via radio. The Yard Master instructed them to perform switching operations in preparation for the train to continue westward. The crew operated their train onto Receiving Track No. 12 and stopped. With the help of a crew van and Driver to transport the Conductor through the yard, the crew members uncoupled and pulled the first 16 cars from the train onto Track No. 11. They then traveled over to the Heines spur track, added Locomotive No. UP5855 to their locomotive consist, and traveled back to Track No. 12. They coupled up to the remaining cars in their train and pulled out of Track No. 12, backed onto Receiving Track No. 2, and coupled up to 66 cars located on that track.

The last switch move the crew was instructed to perform was to pull the now 122-car train west out of Receiving Track No. 2, onto Main Track No. 3, at CP 215, then travel back eastward on Main Track No. 3, to a point clear of the Union Pacific Fruit Express (UPFE) grade crossing. The crew members had been instructed to clear the crossing to allow access to local mechanical personnel to both sides of their train. They were further instructed by the Yard Master to not connect the air lines on the 66 cars to which they had just coupled until they were in the clear on Main Track No. 3. The Yard Master informed the Conductor via radio about a red flag on Main Track No. 3, relating to work being done on a portion of the track.

The Engineer was located on the leading locomotive, UP 5869, at the control stand on the right side of the cab. The train pulled out of Receiving Track No. 2, onto Main Track No. 3, at CP 215, and stopped. The Conductor lined the switch for the main track and boarded the east end, north side, of the rear car, FLIX 3738, and instructed the Engineer via radio to proceed east 50 cars lengths. The Conductor then informed the Engineer that they would need to stop their train short of a red flag, located on Main Track No. 3. The Engineer was operating the train via directions (car counts) from the Conductor who was riding the leading car of the shoving movement. As the Engineer operated the train eastward at approximately 8 mph, he heard the Conductor say 30 cars. When the locomotives cleared the UPFE grade crossing, the Engineer heard the Conductor say 20 cars. Then the Engineer heard in quick succession, "Red flag . . . plug it."

At the time of the accident, it was dark and clear. The temperature was 55° F.

THE ACCIDENT

The Engineer placed the train into an emergency air brake application, bringing it to a stop. The train uncoupled between the 51st and 52nd head cars, allowing the rear 71 cars to roll east. The car the Conductor was riding and the next two adjoining cars went past the red flag and over the derail located at milepost 214.25. The car the Conductor was on derailed, flipped southward onto its side, and slid for approximately two car lengths before coming to rest perpendicular to the main track. The second car derailed and remained upright. The east set of wheels of the third car derailed; however, the car remained upright. The flipping of the first derailed car caused the Conductor to strike his head on the inside well of the car body where the air brake reservoir was located.

The Utility Clerk driving the crew van witnessed the derailment and radioed the Yard Master, who called 911 and contacted the Manager of Yard Operations to investigate.

The Pocatello Police Department was first on the scene, followed by the Pocatello Fire Department, and an ambulance. Emergency response personnel found the Conductor laying partially inside the car well on the B-end of the car he had been riding. The Bannock County Deputy Coroner then arrived on the scene and pronounced the employee dead at the scene, a result of "Massive Head Trauma," inflicted by a blow to the head.

POST-ACCIDENT INVESTIGATION

The railroad reported estimated damages of \$39,542 (\$15,942 to equipment and \$23,600 to the track structure).

This accident met the criteria for classification as a major train accident because damage to rail equipment exceeded the current threshold at the time and one fatality resulted. Following a major train accident, 49 CFR, Part 219, Subpart C, requires that all train crew members involved in the event receive post-accident toxicological testing. The deceased was tested, with negative results. However, the Engineer was not tested, in non-compliance with the regulation, and a recommendation for civil penalty was forwarded to the Federal Railroad Administration's (FRA) Office of Chief Counsel in Washington, D.C.

Furthermore, FRA's post-accident investigation revealed that UP personnel had failed to use the proper fatality testing box on the deceased Conductor. Instead, they used the collection kit designed for live individuals, which makes harvesting and shipment/classification of the required specimen problematic, and a defect was noted for the non-compliance.

A printout of the locomotive event recorder revealed that the speed of the train at the time of derailment was 8 mph.

Track Bulletin Form "C" No. 06089, issued to the crew, stated "To UP5869 West at Pixley, Main Track 3 Pocatello Out Of Service, between milepost 214.25 to milepost 213.50." A red flag and derail were in place at milepost 214.25.

The portion of track on Main Track No. 3 between milepost 214.25 and milepost 214.50 had been out of service since April 1, 2003.

The Conductor had just completed a week of vacation and this was his first tour of duty since returning from vacation. He was using a lantern and proper personal protection gear at the time of the accident.

The Engineer had 29 hours and 15 minutes off duty prior to reporting for duty.

The 7,954-foot train leaving Receiving Track No. 2 comprised 122 cars and three locomotives. While shoving east on Main Track 3, the train had 56 cars with operative train line air brakes and 66 cars without. When the Engineer placed the train into an emergency brake application, the

train uncoupled between TTPX 805048 (the 51st car from the head end) and LW 74539 (the 52nd car from the head end). The rear 71 cars that broke away contained the 66 cars without train line air brakes and five cars with train line air brakes. An inspection by UP mechanical personnel revealed that the coupler knuckle on the east end of car TTPX 805048 was broken into separate pieces, and that the fracture was a fresh break.

The distance between the two sets of cars after they stopped was approximately 21 feet. The crew had been instructed to shove to the clear so Carmen would have access to both sides of the train. The UPFE grade crossing was the first crossing to allow Carmen access to both sides. The UPFE crossing was 8,602 feet west from the point of derailment. The train stopped approximately 837 feet east of the crossing.

The lighting in the vicinity of the accident site, which was originally designed to light the depot for passenger train boarding and de-boarding, illuminated a roadway and a walkway; however, it did not illuminate any of the yard tracks. The lighting for the depot began with a light on the telephone pole, marking milepost 214.25. After this accident, illumination of yard tracks was addressed in a Safety & Health Education of Operating Practices (SHEOP) meeting. As a result, UP has committed to install more lighting in the Pocatello Yard.

The Bannock County Coroner's office did not perform an autopsy.

The Death Certificate lists the cause of death as "Massive Head Trauma."